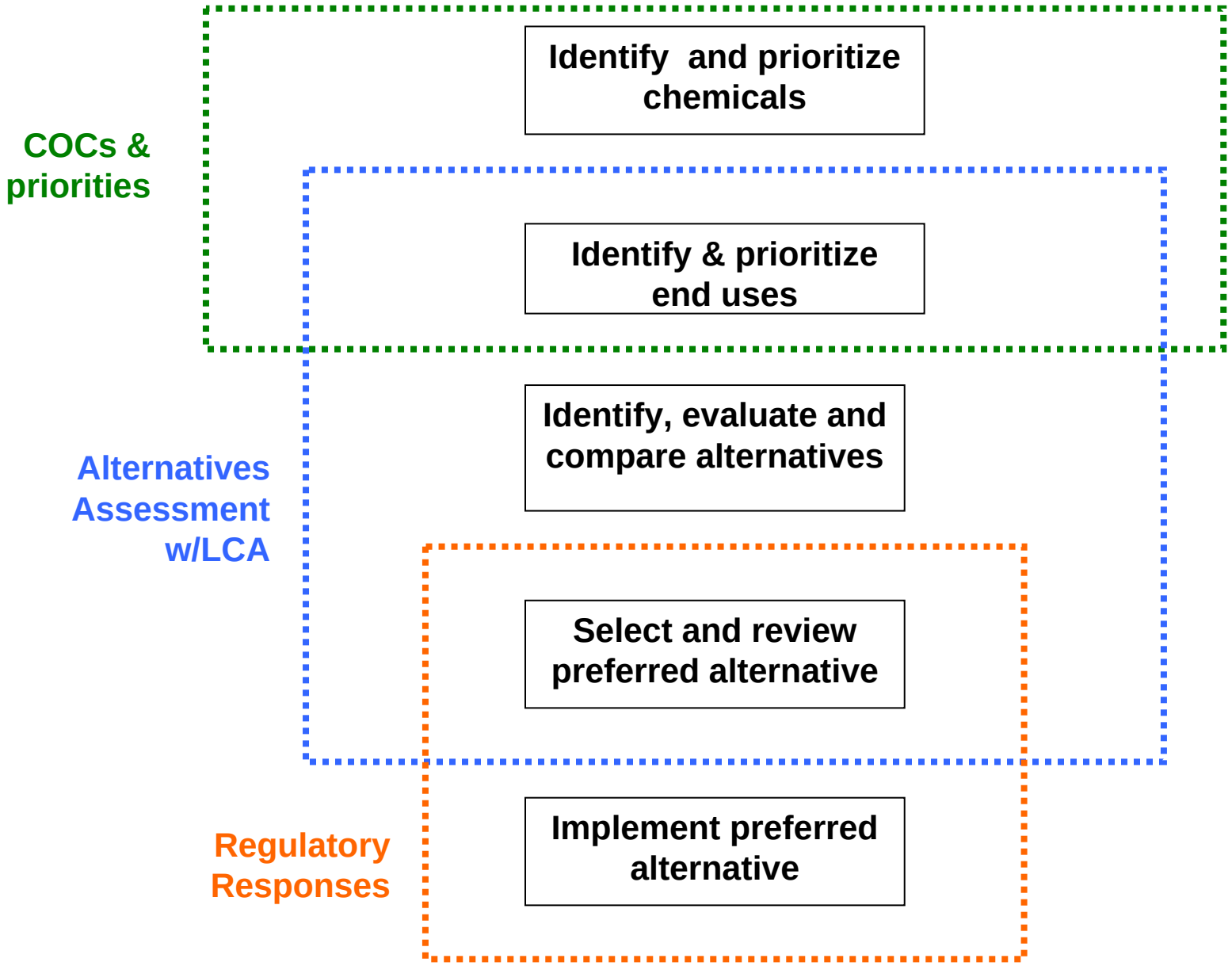
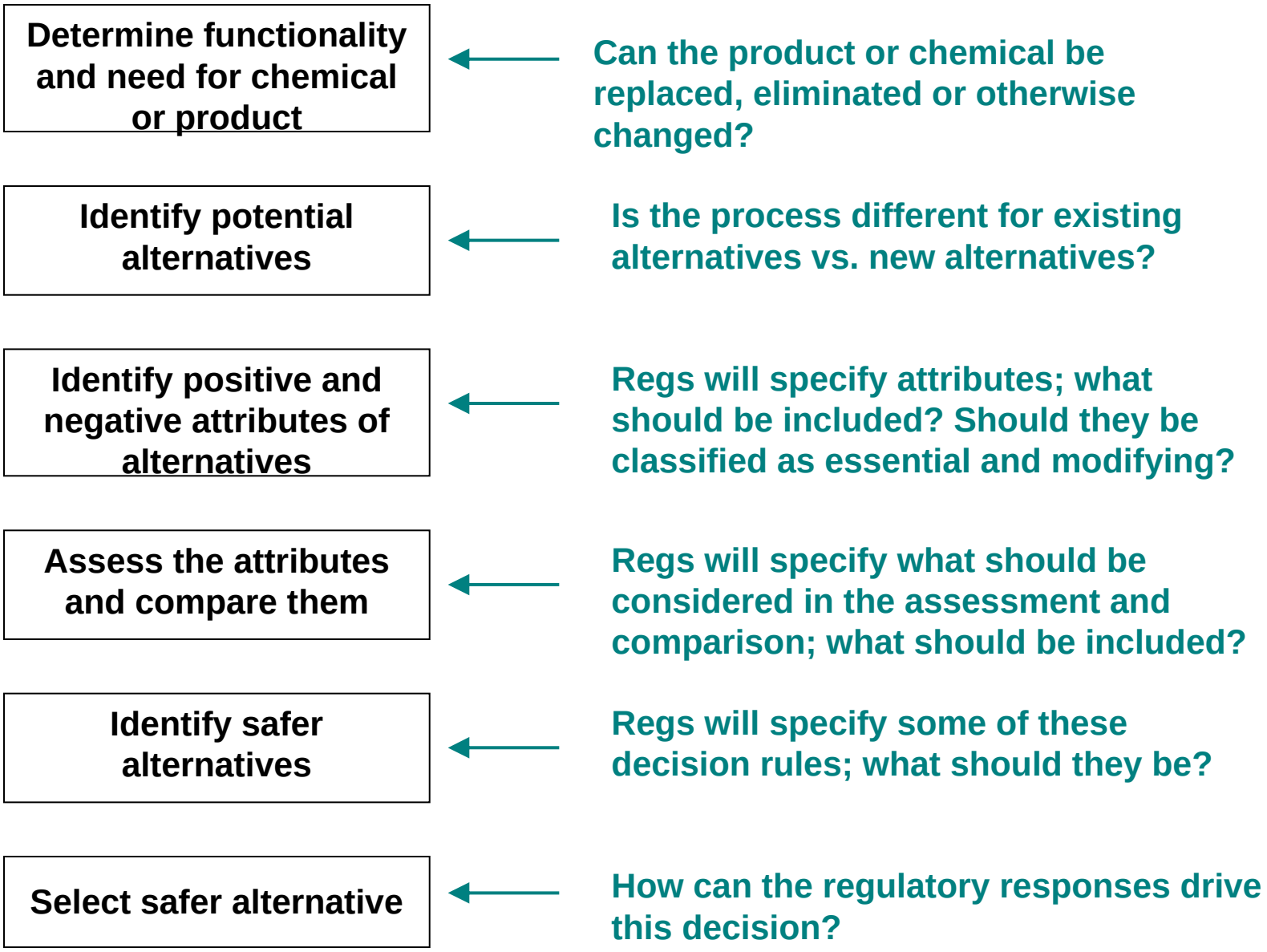
Alternatives Assessment

Choosing safer substitutes

Regulations for Choosing Safer Alternatives



Alternatives Assessment and Considerations



Alternatives Attributes

- Lifecycle approach
- Factors in regs:
  - Product function, useful life, materials/resource consumption, water conservation/quality impacts, air emissions, energy inputs & efficiency, GHG emissions, waste/EOL, public health impacts, environmental impacts, economic impacts
- Others?

Models for Assessing and Comparing Attributes

- Many existing options
  - Open source
  - Proprietary
- Regs specify what the models/modules should consider and assess
- Users select suitable approach

Hierarchy of Preferences - Considerations

- Available info vs. no data
- 12 principles of green chemistry and green engineering
- Acute toxicity, chronic toxicity, EDC
- Consumer exposure, sensitive subpopulations
- Others?

Specific Questions

- What attributes should the alternatives assessment consider?
- Are some more important than others?
- How should the attributes be compared?
- What decision rules should be considered for comparison?
- Should prioritization be included as part of alternatives assessment?
- What should the Alternatives Assessment Process in the regs look like?